In the Claims:

1 – 23.   (Canceled)

24.   (New) A method of inputting alphabetic text to an electronic device having a virtual keyboard on a touch-sensitive screen, said virtual keyboard includes a set of keys wherein each letter of the alphabet is associated with at least one key, the method comprising:

   recording a contact action on the virtual keyboard, wherein the contact action includes an initial contact location, a path along which contact with the touch-sensitive screen continues, and a final contact location at which contact with the touch-sensitive screen is removed,

   forming an input stroke pattern according to said recorded contact action;

   comparing said input stroke pattern with one or more words of a set of words stored in a database, one or more of said set of words associated with an indication of frequency, wherein comparing includes comparing a sequence of locations of the keys associated with the letters comprising the spelling of a word with said input stroke pattern;

   identifying one or more words stored in the database wherein one or more letters of the identified word are each associated with keys that are within a determined threshold distance of a point on the path of said input stroke pattern; and

   determining a numerical score for each of the identified one or more words to establish a relative ranking of the words according to the comparison and the frequency associated with the word.

25.   (New) The method of Claim 24, further comprising offering one or more of the highest ranked words of said determined relative ranking to the user for selection of the word to be input as text.

26.   (New) The method of Claim 24, further comprising comparing the numerical scores determined for the highest ranked word and the second-highest ranked word, and selecting the highest ranked word as text to be generated for input when the comparison between the numerical scores exceeds a determined threshold.

27.   (New) The method of Claim 24, further comprising determining a sequence of two or more points of inflection along the path of said input stroke pattern, said two or more points of inflection including at least one point at or near said initial contact location and one point at or

near said final contact location, and wherein at least two or more of said points of inflection are each matched with a key that is associated with at least one letter of the compared word, wherein each key is within a maximum threshold distance of the inflection point with which it is matched, and wherein one or more determined penalty amounts are included in the calculation of the numerical score for the compared word for each instance in which the sequence along the path of matched points of inflection does not correspond with the sequence in the spelling of the compared word of the letters in the spelling of the compared word.

28.   (New) The method of claim 27, wherein the calculation of said numerical scoring of said word includes a function of the sum of the distances from each determined point of inflection along the path to the key associated with each corresponding matched letter.

29.   (New) The method of Claim 28, wherein a segment distance to a key associated with a letter in the spelling of the compared word that is not matched with a point of inflection is measured from a determined point along a segment of the input stroke pattern that lies between two successive determined points of inflection along the path of said input stroke pattern, and wherein each said segment distance that is less than a maximum threshold distance is included in said function of the sum of distances in calculating said numerical scoring of said word.

30.   (New) The method of Claim 29, wherein the distance from the key associated with a letter in a possible candidate word to a matching point in the input stroke pattern is weighted according to one or more characteristics determined for the matching point before being added to said sum of distances.

31.   (New) The method of Claim 28, wherein the distance from the key associated with a letter in a possible candidate word to a matching point in the input stroke pattern is weighted according to the type of inflection point with which the key associated with a letter in a possible candidate word is matched.

32.   (New) The method of Claim 30, wherein one of said characteristics is the magnitude of the sum of the absolute values of second differences of the x and y coordinates at the point with which the key associated with a letter in a possible candidate word is matched.

33.   (New) The method of Claim 30, wherein the magnitude of the distance from a first key associated with a letter in a possible candidate word to a first matching point in the input stroke pattern is adjusted according to one or more parameters determined with respect to a second key

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associated with a letter in the candidate word adjacent to said letter and a second point in the input stroke pattern to which said second key is matched before adding said weighted distance to said sum of distances.

34. (New) The method of Claim 33, wherein the magnitude of the adjustment made to said distance is further adjusted according to the distance between said first key and said second key.

35. (New) The method of Claim 33, wherein the magnitude of the adjustment made to said distance is further adjusted according to the distance between said first matching input path point and said second matching input path point.

36. (New) The method of Claim 33, wherein one of said parameters is determined as a function of a comparison of the slope of a line between said first key and said second key to the slope of a line between said first matching input path point and said second matching input path point.

37. (New) The method of Claim 33, wherein one of said parameters is determined as a function of a comparison of the distance along a straight line between said first matching input path point and said second matching input path point to the distance along the actual input path between said first matching input path point and said second matching input path point.

38. (New) The method of Claim 27, wherein when the distance from the key associated with a letter in a possible candidate word to any potentially matching point in an input stroke pattern exceeds a determined maximum threshold distance, the word is eliminated as a candidate to match the input stroke pattern.

39. (New) The method of Claim 29, wherein when the distance from the key associated with a letter in a possible candidate word to any potentially matching point in an input stroke pattern exceeds a determined maximum threshold distance, a determined penalty amount is included in determining the numerical scoring of said word, and wherein when a determined point of inflection along the path of said input stroke pattern is not matched with any key associated with a letter in a possible candidate word, a second determined penalty amount is included in determining the numerical scoring of said word.

40. (New) The method of Claim 29, wherein when the distance from the key associated with a letter in a possible candidate word to any potentially matching point in an input stroke

pattern exceeds a determined maximum threshold distance, a determined penalty amount is added to the sum of the distances from which numerical scoring of said word is calculated.

41. (New) The method of Claim 28, wherein when a determined point of inflection along the path of said input stroke pattern is not matched with any key associated with a letter in a possible candidate word, a determined penalty amount is added to the sum of the distances from which numerical scoring of said word is calculated.

42. (New) The method of Claim 29, wherein when the distance from the key associated with a letter in a possible candidate word to any potentially matching point in an input stroke pattern exceeds a determined maximum threshold distance, a determined penalty amount is added to a determined factor by which the sum of the distances is multiplied in calculating the numerical scoring of said word.

43. (New) The method of Claim 28, wherein when a determined point of inflection along the path of said input stroke pattern is not matched with any key associated with a letter in a possible candidate word, a determined penalty amount is added to a determined factor by which the sum of the distances is multiplied in calculating the numerical scoring of said word.

44. (New) The method of Claim 39, wherein said determined maximum threshold distance is adjusted with respect to the measured speed of the motion of the contact action in entering said input path.

45. (New) The method of Claim 27, wherein a secondary numerical score is calculated for one or more of said identified one or more words, and wherein the calculation of said secondary numerical score of said identified one or more words does not include one or more determined penalty amounts that are included in the calculation of said first numerical score, and wherein the difference is calculated between said secondary numerical score for the word ranked highest according to said first numerical score and said secondary numerical score for a second word, and wherein when said calculated difference in secondary numerical scores falls below a determined threshold, an adjustment is made to the ranking established according to said first numerical score.

46. (New) The method of Claim 25, further comprising comparing the numerical scores determined for the highest ranked word and the second-highest ranked word, and offering two or more of the highest ranked words of said determined relative ranking in a distinctive visual

manner to the user for selection of the word to be input as text when the comparison between said numerical scores falls below a determined threshold.

47. (New) The method of Claim 26, further comprising comparing the numerical scores determined for the highest ranked word and the second-highest ranked word, and generating the highest ranked word as text to be input in a distinctive visual manner when the comparison between said numerical scores falls below a determined threshold.

48. (New) The method of Claim 24, further comprising comparing the numerical scores determined for the highest ranked word and the second-highest ranked word, and generating a distinctive auditory signal to the user when the comparison between the numerical scores falls below a determined threshold.

49. (New) The method of Claim 24, further comprising comparing the numerical scores determined for the highest ranked word and the second-highest ranked word, and generating a distinctive visual signal to the user when the comparison between the numerical scores falls below a determined threshold.

50. (New) The method of Claim 24, wherein each letter of the alphabet is associated with at least one key of said virtual keyboard, and wherein said set of keys is arranged according to the standard "QWERTY" layout, and wherein one or more pairs of adjacent keys are separated by inactive areas not associated with any letter.

51. (New) The method of Claim 24, wherein each time a word is generated for input as text immediately following a previously input word, a space is automatically generated between said previously input word and said immediately following word generated for input.

52. (New) The method of Claim 51, wherein one or more of the one or more words stored in the database comprise words that comprise only non-alphabetic characters.

53. (New) The method of Claim 24, wherein when the numerical score determined for the highest ranked word falls below a determined numerical score threshold, said determined threshold distance is increased and said comparing and identifying is repeated using the increased threshold distance.

54. (New) The methods of Claim 24, wherein the degree to which the indication of frequency stored in said database with said word influences the calculation of the numerical

score of said word is modified according to the measured speed of the motion of the contact action in entering said input path.

55. (New) The methods of Claim 39, wherein said determined maximum threshold distance is adjusted with respect to the number of points of inflection determined along the path of said input stroke pattern.

56. (New) The method of Claim 24, wherein the initial indication of frequency associated with one or more words of the set of words stored in said database is proportional to the relative frequency with which the word is generally used in the language from which said words are taken.

57. (New) The method of Claim 56, wherein the indication of frequency associated with one or more words of the set of words stored in said database is set to a value that is lower than the relative frequency with which the word is generally used in the language from which said words are taken.

58. (New) The method of Claim 56, wherein the indication of frequency associated with one or more words of the set of words stored in said database is modified when a word other than the highest ranked word is selected to be input as text by the user.

59. (New) The method of Claim 58, wherein the indication of frequency associated with one or more words of the set of words stored in said database is modified only when the numerical score determined for the word selected to be input as text by the user is better than the numerical score determined for the highest ranked word when the numerical scores are calculated without including the respective indications of frequency.

60. (New) The method of Claim 39, wherein the indication of frequency associated with one or more words of the set of words stored in said database is modified when a word other than the highest ranked word is selected to be input as text by the user and the sum of the determined penalty amounts included in the calculation of the numerical score determined for said selected word is less than a determined maximum threshold.

61. (New) The method of Claim 39, wherein when a sum of the penalty amounts included in calculating the numerical score determined for a possible candidate word exceeds a determined maximum threshold, the word is eliminated as a candidate to match the input stroke pattern.

62. (New) The method of Claim 24, in which one or more words of a set of words are stored in a database represented as strings of letters composed of an initial root string component and a final suffix string component.

63. (New) The method of Claim 62, in which one or more initial root string components are stored as an initial prefix string component followed by a string of zero or more letters comprising the remaining portion of said initial root string component.

64. (New) The method of Claim 63, in which each initial prefix string component comprises two letters.

65. (New) The method of Claim 63, wherein the comparing said input stroke pattern with one or more words of a set of words stored in a database includes comparing the initial portion of said input stroke pattern with one or more prefix string components and identifying one or more prefix string components stored in the database wherein one or more letters of the identified prefix string component are each associated with keys that are within a determined threshold distance of the initial portion of the path of said input stroke pattern and restricting the words to be identified in the database to those words whose composition includes one of said identified prefix string components.

66. (New) The method of Claim 62, wherein the comparing said input stroke pattern with one or more words of a set of words stored in a database includes comparing the final portion of said input stroke pattern with one or more suffix string components and identifying one or more suffix string components stored in the database wherein one or more letters of the identified suffix string component are each associated with keys that are within a determined threshold distance of the final portion of the path of said input stroke pattern and restricting the words to be identified in the database to those words whose composition includes one of said identified suffix string components.

67. (New) The method of Claim 62, wherein two or more of said suffix string components are grouped in a defined set of suffix string components each of which can be combined with one or more root string components to create one or more sets of distinct words, where each word in each said set of distinct words is composed from a single shared root string component, and wherein each such said set of distinct words is stored within the database as a single indication of said shared root string component combined with a single indication of said defined set of suffix string components.

68. (New) The method of Claim 67, wherein said defined set of suffix string components includes an indication of the average relative frequencies of each word in a set of words created by combining said defined set of suffix string components with a single root string component, and wherein each set of distinct words that is stored within the database as a single indication of a shared root string component combined with a single indication of said defined set of suffix string components includes an indication of the frequency of at least one of the words included in said set of distinct words.

69. (New) The method of Claim 27, wherein when the distance from an inflection point to the key with which it is matched is greater than the distance to the matched key from the closest point to the matched key on the path segment immediately preceding the matched inflection point, the distance from the matched inflection point to the matched key is calculated as a weighted average of the actual distance from the matched inflection point and the distance from the closest point to the matched key on the preceding path segment.

70. (New) The method of Claim 69, wherein said weighted average is used as the calculated distance from the matched inflection point to the matched key only when the slope of a line from the path point with which the preceding key was matched to said matched inflection point differs by less than a determined threshold amount from the slope of a line from the preceding matched key to the matched key.

71. (New) The method of Claim 24, wherein said comparing said input stroke pattern includes detecting a determined pattern of movement of the point of contact that is in a region associated with a determined neighborhood of a key associated with a letter of an identified word, and wherein said letter of said identified word that is associated with said key is shifted to upper case in the text of said identified word that is included in the established relative ranking.

72. (New) The method of Claim 71, wherein said determined pattern of movement of the point of contact comprises a movement of the point of contact upward past the top boundary of the virtual keyboard.

73. (New) The method of Claim 71, wherein when said determined pattern of movement of the point of contact is detected in a region associated with a determined neighborhood of a key associated with a letter of a candidate word such that the associated letter is accordingly shifted to upper case in the text of the candidate word to be included in the established relative ranking, and wherein when the resulting pattern of upper-case and lower-case characters in said candidate

word comprises a pattern that is infrequently found in general usage, the numerical score determined for said candidate word is adjusted by a penalty factor corresponding to the infrequency of said pattern of upper-case and lower-case characters.

74. (New) The method of Claim 24, wherein said comparing said input stroke pattern includes detecting a determined pattern of movement of the point of contact within said input stroke pattern, and wherein each letter of each identified word is shifted to upper case in the text of each word included in the established relative ranking.

75. (New) The method of Claim 74, wherein said determined pattern of movement of the point of contact comprises moving the point of contact upward past the top boundary of the virtual keyboard, and performing a distinctive pattern of movement above the top boundary of the virtual keyboard.

76. (New) The method of Claim 75, wherein said distinctive pattern of movement above the top boundary of the virtual keyboard comprises looping the point of contact in a more or less circular motion.

77. (New) An apparatus comprising:
   a touch-sensitive screen for presenting a keyboard device, said virtual keyboard includes a set of keys wherein each letter of the alphabet is associated with at least one key;
   an output device;
   a database for storing words; and
   a processor coupled to the touch-sensitive screen, the output device, and the database, the processor comprising:
      a first component for recording a contact action on the virtual keyboard, wherein the contact action includes an initial contact location, a path along which contact with the touch-sensitive screen continues, and a final contact location at which contact with the touch-sensitive screen is removed;
      a second component for forming an input stroke pattern according to said recorded contact action;
      a third component for comparing said input stroke pattern with one or more words of a set of words stored in a database, one or more of said set of words associated with an indication of frequency, wherein comparing

includes comparing a sequence of locations of the keys associated with the letters comprising the spelling of a word with said input stroke pattern;

a fourth component for identifying one or more words stored in the database wherein one or more letters of the identified word are each associated with keys that are within a determined threshold distance of a point on the path of said input stroke pattern; and

a fifth component for determining a numerical score for each of the identified one or more words to establish a relative ranking of the words according to the comparison and the frequency associated with the word.

78. (New) The apparatus of Claim 77, further comprising:

a sixth component for presenting one or more of the ranked words on the output device.

79. (New) The apparatus of Claim 77, further comprising:

a sixth component for comparing the numerical scores determined for the highest ranked word and the second-highest ranked word; and

a seventh component for selecting the highest ranked word as text to be generated for input when the comparison between the numerical scores exceeds a determined threshold.